"Details of construction were recorded by Sarfert and Damm and, following them, by Haddon and Hornell. What additions can be made here will be given mostly in the accompanying figures. The following account will emphasize the process of building a canoe and its supernatural sanctions. The membership of the working parties, and the obligations which bring them to the job and keep them on it, will be discussed in the chapter on economics.

The fine point in construction of the hull is the drawing of lines to ensure its being hewn to a symmetrical shape. Tom said: 'Suppose some man savvy chop, no savvy line; he no savvy carpenter.' The origin of the lore of drawing lines is explained in the following myth. [KS: See category 539] This is one of several versions of one of the most popular tales about the sky-dwellers. In this one the building of a new type of canoe is emphasized. What is the climax in two other versions (one collected by Spiro, the other embodied in a song) is omitted here--details of how Galēt, by reawaking his wife's passion for him, induced her to follow him back home. All the characters are supernatural beings, though they behave much like human islanders.

HOW SEIMELIGARĀRA TAUGHT CANOE-BUILDING TO SEILANGI

Galēt was very sad because he could not see his wife. He was living in the Men's House, while she, Ganauliwlr, was in her mother's house. He did no work, staying

inside his mosquito net. Food was brought to him there. GanauliwIr, too, stayed inside the mosquito net in her mother's house. [54]

Then Virar came, and took GanauliwIr away with him to Ulimatau.

Galet had two brothers, Wëtreilók and Uterang. Wëtreilók was the husband of Seramaliwók, sister of GanauliwIr.

Wëtreilók said to his wife 'I am going to talk to Galēt. Then we will go bathing together. While we are in the water, you come past, dressed in your best clothes.'

Seramaliwók made ready, putting on a new skirt, flowers in her hair, and red turmeric paint on her face and body.

Wëtreilók went to the Men's House and called to Galēt, who was asleep in his mosquito net.

'Wake up, Galēt! Your wife is gone! Virar took her away!'

He persuaded Galet that the first thing to do was to go bathing.

While they were in the water, Seramaliwók came by in all her finery.

'Oh, look!' Galet cried. 'There is the wife for me!'

'Never mind that one', Wëtreilók replied. 'She is my wife. But she is nothing compared to her sister. I mean GanauliwIr, the wife that Virar took away from you.'

'Is GanauliwIr as beautiful as all that?'

'Indeed she is.'

The thought of losing such a beautiful woman made Galet furious. He blew his whistle,

until people said 'What's the matter with Galēt?' He took a stick and began to wreck the Men's House.

His father, the chief, tried to console him by summoning all the women, so that Galēt might look them over and choose the one he liked best to be his new wife. When they came, there was one that Galēt thought he liked very much.

But Wētreilok told him 'Oh, she is nothing like so beautiful as the one you had before.'

Galēt broke out again in fury. He blew his whistle, took his stick, and began to wreck his father's house.

Then he decided to have a canoe made, so that he could go to Ulimatau and try to get his wife back. The work was in charge of Seimeligarāra, who had studied the art of canoe-building with Seilangi and Wolfat. He made a canoe in the most approved style of the time. But Galēt did not like it.

'What kind of canoe would you like?'

'Oh, I want something different.'

Seimeligarāra went to Seilangi and asked 'What kinds of canoes can you make?' [55]

Seilangi said 'Only the one kind, like all those we have here.'

'Well just you wait. I'm going to make something different.'

So Seimeligarāra went to work and made a canoe with a special kind of forked end (metaliwā). The fork had a wide, round opening instead of a pointed one. Moreover, he painted the inner curve of the fork white; the outer half, black, instead of making it

black all over. When it was launched it looked very fine, and proved to be a fast sailer. Galēt was greatly pleased with it,

Galēt said 'Now I am going to Ulimatau to get my wife. Who is going with me?'

His two brothers, Wētreilok and Uterang, went with him; also Wētreilok's wife, Seramailowok.

Galēt took the sheet. Uterang went aft and took the wheel. Wētreilok went below and manned the pump.*

Seramaliwok lay on the platform over the outrigger, under the pandanus shelter (gaimwemwe). Galēt had had this rigged so that it opened toward the hull of the canoe instead of away from it, as is usual. This was so that he could look at Seramaliwok.

During the voyage Galēt flirted with Seramaliwok, and at last put his finger in her genitals.

Wētreilok, down in the hull, smelled the discharge, but went on working the pump.**

"* Tom said 'wheel' and 'pump', although in an Ifalik canoe, to this day, steering is done by a steering paddle, and bailing by a wooden bailer.

** This bit of obscenity, which has nothing to do with the rest of the story, unless to emphasize Galēt's passionate nature, seems to be introduced for humorous effect. I took it down solemnly, but found out later that a more acceptable response would have been uproarious laughter."

They reached Ulimatau and took down sail and mast.

Seramaliwok went ashore and found her sister, GanauliwIr, in the house of Virar.

'Where is your husband?'

'He is out in the bush, putting pandanus leaves around the trunks of the coconut trees so that the rats can't climb them and eat the young coconuts.'

'I have come to take you with me.'

'Where?'

'To see your old husband, and decide whether you like him best.'

'All right. But the husband I have now is a wonderful man. There is no-one like him.'

'Still, you'd better come and see the old one again.'

When GanauliwIr saw Galēt, the husband she had deserted, she decided at once that she loved him best, and got in the canoe with him and went back to Ururial.

(At this point in other versions comes an account of a dance in which Galēt wins [56] back his wife's love; and on the return journey, instead of going in a canoe, she follows him as he walks on the waves.)

After the canoe he built had made such a successful voyage, Seimeligarāra went to Seilangi and offered to teach him canoe-building. He said he was willing to do this because he, Seimeligarāra, did not have enough people to work for him, while Seilangi had plenty.

So Seimeligarāra taught Seilangi the art of the measuring-line. If you use it rightly,

the canoe will be fast in the water. If you don't use it, but rely on your eye and the adz, the canoe will be very slow. Seimeligarāra taught Seilangi all the proper measurements.

Seilangi went to work on a canoe. Whenever he had any doubts or difficulties, he took them to Seimeligarāra. Seimeligarāra taught him how to shape the bottom of the canoe, how to shape and measure the sail, and how to make holes in the outrigger float to tie it to the booms.

Seilangi taught the art of the line to SemerIk. From these three it spread among the gods. People down on earth asked the three gods to descend and teach them the art. The gods came down, so now people know how to shape a canoe.

In this story the special shape of forked end made by Seimeligarāra evidently symbolizes the whole art of shaping a hull by means of lines. The forked end is called metali wā, face or eye of the canoe. The particular shape introduced by Seimeligarāra is called pōpō, the name used by Haddon and Hornell (from what source is not stated) for the type of 'flying proa' used throughout the region. On Ifalik pōpō is also the name of the two end sections of the underbody. The Hamburg expedition obtained a model canoe on Ifalik with this kind of forked end. Its name, they were told, was gauat, and there had been one on Ifalik until the typhoon of 1907. Tom said that in Ifalik a carpenter might

still build a canoe of pōpō type if he wanted to, and that there were many in some other islands. In a version of the Galēt story collected by Spiro, without native text, the peculiarity of the canoe built by Seimeligarāra for Galēt is that the hull 'turns at an angle.' Conceivably this could be a way of describing an asymmetric hull. However that may be, at present the story serves on Ifalik as a mythological charter for the practice of drawing lines on a canoe hull so that it can be hewn into a symmetrical shape."

4: Krämer--252-254 (1909) 1937 Woleaians-1-3
116, 341 Woleai

The dwellings in the Oleai district are almost all hexagonal just like those of Yap, except that they have no stone foundations; Christian proves the latter point on a chart. The basic architectural outlines here, as further eastward, are given by the frame building with wooden walls. That is to say, we are dealing with the rectangular cella to which triangular projections, porches, known as falfaleping, are attached on the side of the gables. For that reason, the roof point must project strongly and may be supported by a post up to 4 meters in height which is called súrung. (Figures 117 and 118 show it on a storehouse and it is also pictured on photo 17b but it is not straight... [VMM: see source for photos). But before we discuss this feature in detail we should add that this post is generally lacking. In that instance the hipped roof of the gable side rests on the triangular projection, if the cella is open to the side of the gable and is directly connected with the space of the building projection as is the case on figure 119 of house 1, Sangi, and house 3 (photo 15a). The interior of house 8, Falel, however, is rectangular similar to the representation of Figure 117. Here the porch constitutes a special room both in front and rear. (Born: im mal paloi).

If the triangular building projection of planks is lacking, a triangular roof frame is erected and supported by the roof top post which is called súrung (shown in plate 17b) or the latter may be omitted and only 1-2 supporting posts be used for the eaves (Figure 120). Under such circumstances the triangle becomes more rounded in shape and as in the case of the [254] last mentioned house brim-like eaves are formed out of three or

four poles. In figure 120 these purlins are made of one piece and are bent around the outside and short rafter-like poles rest on them in both instances.

Thus house 8, Fálel, has a closed square cella and a roundish porch roof both in front and in the rear of the house. It is not only the post, but the various separate supports which may be lacking. Then the overhanging roof is supported by horizontal poles which jut out from the long side of the house and rest on the upper frame of the gable side. At the most support is offered by a yoke, from the overhanging roof of the canoe-house. I saw a house with bent purlins in front of the poles on Votagai. Here, as on Tagaulap, many of the old beautiful houses were left standing, since the islands were spared destruction from the typhoon of 1907.

It has been mentioned that houses without the triangular gable projections are frequent. They are rectangular, made of timber; in short they are simple frame houses.

In one case, that of house 1, Gabengatil of Tagaulap the gable-wall of the cella with its wall fillings and the door in the middle was not as high as the upper frame beam so that there was another one underneath, as is the case with the bai on Palau; that meant that a window existed, but only on the gable-sides. Projecting buildings were lacking.

The house with the roof point post, surung, on Votagai had planks at the edge of the roof on the sides of the gables in the manner of the outer gable frames of the Palau bai which was pierced by the ends of the purlins. They are called eaolim and they rest on

the projecting upper longitudinal frame beams which are called gapilivei and which are approximately 1 meter in length. They, in turn, are supported by a post, sur tavol gapilivei, which rests on the projecting lower longitudinal frame beam, the gogodj levilipeg, or rather on its end which is known as the tavol. The lower transverse beam of the framework of the cella is called gogodj votap and the cooresponding upper beam is the gabilibing. Figure 118.

28: Spiro--41-42 (1947-48)1949 Woleaians-1-2
116, 463, 502, 341 Ifalik

"The arts of the palu [WPM: navigators] and zenap, [engineers] were both supernatural dispensations, according to Ifaluk tradition, having been taught by 'gods', and were then handed down orally from generation to generation. These arts are taught to an apprentice over a considerable period of time, by the practitioner, for which instruction he receives gifts of lavalavs, skirts, tobacco, food, and other valuables. Though there is no hard and fast rule both these arts usually run in families, in the widest sense of that term, a practitioner giving preference to his own bilateral relatives, as well as to his in-laws. For example, the palus are Tom, his brother, his wife's brother, a distant kinsman, and two whom Tom is training, his son, and his sister's son. The Palu and the Zenap are among the most respected men on Ifaluk, and their offices are aspired to by the young men. In the Bavilais Moral Ideology Test a significant number of young men, when asked what they would like the most, answered that they would like to be a palu and/or a zenap.

That these two crafts are highly respected should occasion little surprise. Almost any adult male knows how to construct a house or a small canoe, or how to navigate a canoe in the open seas around the atoll. But the construction and repair of a canoe-house, or the navigation of a canoe on an overseas trip requires a highly specialised skill, which only the specialist possesses. The need for great skill becomes obvious when one

considers the engineering principles that are necessary for the construction of a large structure or the knowledge required to sail as many as hundreds of miles over open sea, without aid of a compass or navigation chart, let alone Radar or Loran. (5) When any such task is to be performed, therefore, the specialist is called in, and payed for his services with lavalavas, rope, and food.

A few men have acquired skills in all these fields. Tom, for example, is a navigator, as well as a canoe carpenter and structural carpenter. This is unusual, for there are some who are canoe-carpenters, but who are not competent to build or repair [42] buildings, and there are very few who are navigators as well as carpenters."

"5. The skipper of the LST that brought us home, informed me that his Radar was not working on his trip to Ifaluk, and he was worried lest he not find the atoll since the slightest deflection of the needle of his compass would cause him to by-pass the island. The native navigator has only the stars, sun, moon, currents, and physical signs, such as reefs, flying birds, and schools of porpoises, to guide his directions."